73-3-20/24

AUTHOR: Golovin, P. V., Shaposhnikova, Z. B., Abramova, M. A. and Gerasimenko, A. A.

TITLE: Treatment of Beetroot Juice by Reduced Quantities of Lime and Ionites. (Obrabotka Sveklovichnogo Soka Umen'shennym Kolichestvom Izvesti i Ionitami)

PERIODICAL: Ukrainskiy Khimicheskiy Zhurnal, 1957, Vol. 23, No.3, pp. 397-399 (USSR).

ABSTRACT: Synthetic resins- ionites- can be used for the purification of beetsugar juices by separating the mineral and organic impurities. They are stable in alkaline and acid media, they swell but do not dissolve in water and sugar solutions and have a degree of absorption of cations and anions. These ionites were used for the purification of juices treated with 1.3% reduced lime and juice II (saturation lime consumption 2.75% per weight of the juice). The cationite ЭСПАТИТ-1 and the anionite АН-2ф were used as they were most easily available and are generally used in the sugar industry. The static volume of ЭСПАТИТ-1 (related to Na) was 4.2%, the dynamic volume of the anionite (related to HCl) was 13.7%. The static method was employed for purifying the saturated juices when using cationites.

Card 1/3 This method was developed in the Laboratory for Sugars

73-5-20/24

Treatment of Beetroot Juice by Reduced Quantities of Lime and Ionites.

of the Institute for Organic Chemistry AN USSR under the direction of P. V. Golovin. The method consists in mixing a defined quantity of the regenerated cationite with the juice in a mixer until the pH of the solution reaches 4.0 - 4.5. Then the cationite is separated by decantation or filtration. The obtained saturated acidic juice is treated with the anionite by passing the juice through an anionite column (dynamic method). Thus the pH is increased to 8.0 - 8.5. It was found that 1.5% of absolutely dry cationite (according to the weight of the juice) and a contact time of 8 minutes were necessary to attain a pH 4.2 of the saturated juice. To increase the pH of the juice from 4.2 - 8.5 a 8% volume of anionite was required. The purification was carried out at 20°C. The juice treated with reduced lime quantities and juice of the II. saturation were analysed before and after treatment with the ionites for sugar-, colloid-, calcium salt-, ash-content and colour-tests were made. Analytical data are tabulated. This table proves that cationite treatment of juices increases their quality by 1.7 - 2.2 units and

Card 2/3 reduces the colouration. The anionite treatment lowers

Treatment of Beetroot Juice by Reduced Quantities of Lime and Ionites.

the colouration more than twice and improves the quality by 0.4 - 0.8 units. There are 1 table and 3 Slavic references.

SUBMITTED: December, 22, 1956.

ASSOCIATION: Institute of Organic Chemistry, Academy of Sciences Ukrainian SSR, Sugar Substances Laboratory. (Institut Organicheskoy Khimii AN USSR, Laboratoriya Sakharistykh Veshchestv).

AVAILABLE: Library of Congress.

GERASIMENKO, A.A.; GOLOVIN, P.V.; ABRAMOVA, M.A.

Method for growing saccharose crystals in the laboratory. Sakh. prom. 31 no.11:71 N '57. (MIRA 11:1)

(Sugars)

GOLOVIN, P.V.; ABRAMOVA, M.A.; GERASIMENKO, A.A.; SHAPOSHNIKOVA, Z.B.

Determining colloidal substances in juices and syrups. Sakh. prom. 31 no.12:51-52 D '57. (MIRA 11:1)

1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlennosti imeni Mikoyana.
(Sugar--Analysis and testing) (Colloids)

GOLOVIN, P.V.; GERASIMENKO, A.A.; SHAPOSHNIKOVA, Z.B.; ABRAMOVA, M.A.

Using bentonites for purifying juices of second carbonation.
Bent. gliny Ukr. no.2:195-198 '58. (MIRA 12:12)

1.Institut organicheskoy khimii AN USSR.
(Bentonite) (Sugar manufacture)

GERASIMENKO, A.A.

GOLOVIN, P.V.; GERASIMENKO, A.A.; ABRAMOVA, M.A.

Rate of crystallization of sucrose in green sirup at 70°, 80°, and 90°. Sakh. prom. 32 no.3:10-12 Mr '58. (MIRA 11:4)

1. Institut organicheskoy khimii AN USSR.
(Sucrose) (Crystallization)

'ATS, Yu.I., otv. za vypusk; GERASIMENKO, A.A., otv. za vypusk; MIKHAYLOV, V.A., otv. red.; PERTSOVA, M.N., tekhn. red.

[Dust control in electrode shops] Bor'ba s pyl'iu v elektrodnykh tsekhakh. Sverdlovsk, 1959. 10 p. (Seriia: Obmen opytom dlia vnedreniia v praktiku, no.6) (MIRA 14:11)

1. Sverdlovsk. Nauchno-issledovatel'skiy institut gigiyeny truda i profpatologii. 2. Otdel gigiyeny truda pri Sverdlovskom nauchno-issledovatel'skom institute gigiyeny truda i profpatologii (for Kats, Gerasimenko).

(Dust—Removal) (Electrodes)

GOLOVIN, P.V.; GERASIMENKO, A.A.; ABRAMOVA, M.A.

Rate of crystallization of saccharose at high temperatures.
Sakh. prom. 33 no.1:28-30 Ja '59. (MIRA 12:1)
(Sugar) (Crystallization)

GOLOVIN, P.V.; GERASIMENKO, A.A.

New layout for the purification of diffusion juice. Sakh. prom. 33 no.4:40-41 Ap '59. (MIRA 12:6)
(Sugar manufacture)

GOLOVIN, Pavel Vasil'yevich; GERASIMENKO, Alaksey Antonovich; TRET'YAKOVA, Galina Sergeyevna; ROMINSKIY, I.R., doktor tekhn.nauk, otv.red.; POKROVSKAYA, Z.S., red.izd-va; MATYSHCHUK, A.A., tekhn.red.

[Saccharates and their use in industry] Sakharaty i ikh primenenie v promyshlennosti. Kiev, Izd-vo Akad.nauk USSR, 1960. 234 p. (MIRA 14:4)

(Sucrose)

S/137/61/000/008/028/037
A060/A101

AUTHORS: Gratsyanov, Yu. A., Gerasimenko, A. A.

TITLE: New magnetically-soft iron-nickel-silicon deformable alloys

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 8, 1961, 12, abstract 8I96 ("Sb. tr. Tsentr. n.-i. in-t chernoy metallurgii", 1960, no. 23, 34-46)

TEXT: As result of a study of the effect of various additives upon the engineering and magnetic characteristics of Fe-Ni-Si alloys containing 8 - 11% Si and 5 - 20% Ni, the possibility is established of obtaining deformable alloys with high-grade magnetic properties, containing 8 - 9% Si and 10 - 14% Ni with admixtures of up to 1.0% Cr up to 0.1% Ce, and up to 0.01% Li. The peculiarities of the manufacture of strips from the abovementioned alloys are established - a slowed down cooling schedule for the castings and their heating up before forging or hot-rolling, heating up of the hot-rolled sheets before rolling down to strip with 0.35 mm thickness, and some peculiarities of the rolling schedules are indicated. There are 12 references.

T. Rumyantseva

[Abstracter's note: Complete translation]

Card 1/1

GOLOVIN, P.V.; ABRAMOVA, M.A.; GERASIMENKO, A.A.

Reducing the rate of crystallization of saccharose in the green sirup at 90°. Sakh.prom. 34 no.3:13-15 Mr '60. (MIRA 13:6)

(Sugar manufacture)

GOLOVIN, P.V.; KRASIMENKO, A.A.; TRET'YAKOVA, G.S.

Precipitation of saccharose from solutions of molasses in a form of calcium trisaccharate. Sakh.prom. 34 no.10:29-30 O '60.
(MIRA 13:10)

1. AN USSR.
(Sucrose) (Molasses)

GERASIMENKO, A.A.; ABRAMOVA, M.A.; PETRENKO, L.S.

Determination of the standard quality of sugar-beet juice.
Sakh.prom.35 no.3:31-32 Mr '61. (MIRA 14:3)
(Sugar manufacture—Quality control)

GOLOVIN, P.V.; ABRAMOVA, M.A.; SHAPOSHNIKOVA, Z.B.; GERASIMENKO, A.A.; DENISOVA, Ye. V.; TRET'YAKOVA, G.S.

Regeneration of ion exchangers. Sakh.prom. 35 no.6:13-16 Je '61. (MIRA 14:6)

1. Institut organicheskoy khimii AN USSR.
(Sugar manufacture) (Ion exchange)

GERASIMENKO, Aleksey Antonovich; ABRAMOVA, Mariya Aleksandrovna; GOLOVIN, Pavel Vasil'yevich; SHAPOSHNIKOVA, Z.B., kand. tekhn. nauk, otv. red.; POKROVSKAYA, Z.S., red.; DAKHNO, Yu.B., tekhn. red.

[Ion exchange resins in the food industry] Ionoobmennye smoly v pishchevoi promyshlennosti. Kiev, Izd-vo Akad. nauk Ukrainskoi SSR. 1962. 271 p. (MIRA 16:7)
(Ion exchange resins) (Food industry)

GALABUTSKIY, Pavel Gavrilovich[deceased]; GERASIMENKO, Aleksey Antonovich; SUSHKOV, A.S., kand.tekhn. nauk, otv. red.; GOLOVIN, P.V., red.; KAZAKEVICH, V.I., red.izd-va; KADASHEVICH, O.A., tekhn. red.

[Methods of investigation and the chemical and technological control of beet sugar production]Metody issledovaniia i khimiko-tekhnologicheskii kontrol' sveklosakharnogo proizvodstva. Pod red. P.V.Golovina. Kiev, Izd-vo Akad.nauk USSR, 1962. 355 p. (MIRA 16:3)

1. Rukovoditel' laboratorii khimii i tekhnologii uglevodov Instituta organicheskoy khimii Akademii nauk Ukr.SSR, Chlen-korrespondent Akademii nauk Ukr.SSR (for Golovin).
(Sugar manufacture)

SHAPOSHNIKOVA, Z.B.; ABRAMOVA, M.A.; GOLOVIN, P.V.; PETRENKO, L.S.; GERASIMENKO, A.A.

Conditions of the performance of ion exchangers in juice purification. Sakh. prom. 37 no.8:38-41 Ag '63. (MIRA 16:8)

1. Institut mikrobiologii AN UkrSSR.
(Sugar manufacture)
(Ion exchanging substances)

GOLOVIN, Pavel Vasil'yevich[deceased]; [illegible], Aleksandr Antonovich; SHAPOSHNIKOVA, Z.S., kand. tekhn. nauk, otv. red.

[Chemistry and technology of sugar beet production] Khimiia i tekhnologiia sveklosakharnogo proizvodstva. Kiev, Naukova dumka, 1964. 728 p. (MIRA 18:2)

GERASIMENKO, Aleksey Antonovich; SHAPOSHNIKOVA, Z.B., kand. tekhn. nauk, otv. red.; POKROVSKAYA, Z.S., red.

[Sugar crystallization] Kristallizatsiia sakhara. Kiev, Naukova dumka, 1965. 315 p. (MIRA 18:12)

Card 2/2

L 07391-67 EWT(m)/EWP(t)/ETI IJP(c) [illegible]
ACC NR: AP6030447 (N) SOURCE CODE: UR/0193/66/000/008/0003/0005

AUTHOR: Ryabchenkov, A. V. (Doctor of chemical sciences); Gerasimenko, A. A.

ORG: None

TITLE: Copper plating of steel components in polyethylene-polyamine electrolytes

SOURCE: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 8, 1966, 3-5

TOPIC TAGS: copper plating, electrolyte, polyamine compound, ammonium sulfate

ABSTRACT: The authors discuss the use of new electrolytes developed at the Central Scientific Research Institute of Technology and Machine Building for copper plating. These solutions are based on polyethylene-polyamine copper complexes which are superior in many respects to cyanide electrolytes. The optimum polyethylene-polyamine copper-plating electrolyte has the following composition (g/l) copper sulfate 45-55; polyethylene-polyamine 50-70; ammonium sulfate 100-150. The optimum solution has an alkalinity of pH 8.2-9.0, a temperature of 18-23°C an optimum current density of 0.6-1.0 a/dm^2. The current efficiency is 85-98% depending on current density and component concentration. Current efficiency decreases with an increase in current density, polyethylene-polyamine concentration past 75 g/l and ammonium sulfate concentration

ACC NR: AP6030447

creased to 100-125 and 200 g/ℓ respectively to increase the throwing power by a factor of approximately 1½ although the deposition rate is somewhat reduced in comparison with the optimum composition. Deposition rate under optimum conditions is 6-10 μ/hr. Plating procedure and sequence of operations are discussed.

SUB CODE: 11/ SUBM DATE: None

Card 2/2 LS

L 07224-67 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6032486 SOURCE CODE: UR/0413/66/000/017/0025/0025

INVENTOR: Gratsianov, Yu. A.; Gerasimenko, A. A.; Pasechnaya, V. V.

ORG: none

TITLE: Method of obtaining products by a drop forging. Class 18, No. 185354 [announced by Central Scientific Research Institute of Ferrous Metallurgy im. I. P. Bardin (Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 17, 1966, 25

TOPIC TAGS: drop forging, synthetic slag, magnetic alloy, rolling, metal rolling

ABSTRACT: An Author Certificate has been issued for the use of combined methods of preparation and treatment of alloys. They are melted in the basic crucible treated with synthetic lime slag followed by diffusing deoxidation and introduction of aluminum under a cryolite slag, quenching the cast billet up to 300C of 200 deg/hr, heating while being rolled at not more than 200 deg/hr up to

Card 1/2 UDC: 669.187.26:669.15'24'25-192.6-41:621.777:621.984

ACC NR: AP6032486

800C, and after that up to 1270—1300C at any speed, and finally rolled at this temperature and drop forged at 800—850C for obtaining magnetic-alloy products with any desired configuration. [Translation]

SUB CODE: 13/ SUBM DATE: 11Mar64/

Card 2/2 egh

ULANOVSKIY, I.B.; GERASIMENKO, A.D.

Influence of algae on the corrosion of carbon steel in sea water and the effect of ultrasonic vibrations on the intensity of photosynthesis of algae. Trudy Inst. okean. 70:246-251 '63. (MIRA 17:7)

GERASIMENKO, A. P.

"Organizational Forms and Methods of Work of Laboratory divisions of Sanitary-Epidemiological Stations," was a report given at an interoblast scientific-practical conference on Problems of Laboratory diagnosis of infectious diseases was held at the Tomsk Scientific Reasearch Institute of Vaccines and Sera, 12-16 March 1956.

SUM: 1360 p 237

GERASIMENKO, A.P.

Interregional conference in Tomsk on the theory and practice of laboratory diagnosis of contagious diseases. Lab. delo 3 no.2:60-62 Mr-Ap '57 (MLRA 10:5)
(COMMUNICABLE DISEASES)

GERASIMENKO, A.P.

Results of the conference on natural foci diseases, sponsored by several institutes. Zhur.mikrobiol.epid. i immun. 28 no.5:149-153 My '57. (MLRA 10:7)

(EPIDEMIOLOGY)

GERASIMENKO, A.P.

Brief news. Zhur. mikrobiol. epid. i immun. 29 no.11:149-151 N '58.
(POLIOMYELITIS) (HEPATITIS, INFECTIOUS) (MIRA 12:1)

GERASIMENKO, A.P.

Interprovince conference. Zhur.mikrobiol.epid.i immun. 30 no.8:152 Ag '59. (MIRA 12:11)

(WATER--BACTERIOLOGY)

GERASIMENKO, A.P.

Interprovince conference in Tomsk, February 24-26, 1959. Gig.i san. 24 no.11:80-82 N '59. (MIRA 13:4)
(SANITATION) (WATER--BACTERIOLOGY)

(ERASIMENKO, A.P.

Effectiveness of the epicutaneous method of BCG vaccination in Tomsk. Trudy TomNIIVS 11:299-303 '60. (MIRA 16:2)

1. Tomskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok.
(TOMSK--BCG VACCINATION)

VASIL'YEVA, I.P.; GERASIMENKO, A.P.

Epidemiological role of carriers of the diphtheria bacillus in relation to its toxigenicity. Trudy Tom NIIVS 12:115-117 '60 (MIRA 16:11)

Inoculation against diphtheria in the rural region of Tomsk. Ibid.:123-124

1. Tomskiy nauchno issledovatel'skiy institut vaktsin i syvorotok.

*

NIKONIN, L.G.; GERASIMENKO, A.P.

Brief news. Zhur.mikrobiol.epid.i immun. 31 no.2:156-158 F '60.
(MIRA 13:6)
(CHITA--COMMUNICABLE DISEASES) (SIBERIA--POLIOMYELITIS)

VASIL'YEVA, I.P.; GERASIMENKO, A.P.; SAGAN, N.I.

Causes of a high diphtheria disease incidence and ways for eliminating it in rural Tomsk District. Zhur.mikrobiol., epid.i immun. 32 no.12:117 D '61. (MIRA 15:11)

1. Iz Tomskogo instituta vaktsin i syvorotok i Tomskogo sel'skogo rayonnogo otdela zdravookhraneniya.
(TOMSK DISTRICT—DIPHTHERIA—PREVENTION)

GERASIMENKO, A.S. [Herasymenko, A.S.], Geroy Sotsialisticheskogo Truda, delegat XXII s"yezda Kommunisticheskoy partii Sovetskogo Soyuza

Introduce advanced practices on every farm. Mekh. sil'. hosp 12 no.11:4-5 N '61. (MIRA 14:11)

1. Predsedatel' kolkhoza "Vsesvitniy Zhovten'", Chernigovskogo rayona, Chernigovskoy oblasti.
(Ukraine—Farm mechanication)

87998

S/135/61/000/001/011/018
A006/A001

1.5400 2708

AUTHORS: Kostyuk, V.A., Candidate of Technical Sciences, Kozlov, Yu.M., Shuvalov, A.V., and Gerasimenko, A.V., Engineers

TITLE: Industrial Units for Welding With an Electron Beam

PERIODICAL: Svarochnoye proizvodstvo, 1961, No. 1, pp. 41 - 43

TEXT: The authors developed two special automated units for the welding of several work pieces of the same type without disturbance of the vacuum. 1) the ЭЛУ-1 (ELU-1) unit is intended for the welding with an electron beam of longitudinal and circumferential joints on high-melting and easy oxidizing metal parts. Up to 10 articles of the same type can be welded without disturbance of the vacuum. The unit consists of a working chamber, mechanisms for the fastening and displacement of the work, an electron gun, a vacuum station, a high-voltage power supply, a three-phase interrupter and a gun control desk. The working chamber is placed on a heavy frame; the mechanisms of fastening and displacement are arranged on trolleys and are wheeled out of the chamber during loading and unloading the machine. Figure 2 shows an attachment for the welding of 250 - 1,000 mm sheets which are fastened to the welding table. Round parts are welded on a special mechanism as-

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87998

Industrial Units for Welding With an Electron Beam

S/135/61/000/001/011/018
A006/A001

suring the automated setting of the work, assembly of elements to be welded in the vacuum, and rotation during welding. The vacuum station is equipped with 2 fore-vacuum pumps and a high-vacuum unit equipped with a vapor jet pump ensuring a vacuum of not less than 5.10^{-5} mm Hg within 15 - 20 minutes after the onset of evacuation. An electron beam gun as described by Ye.M. Kozlov in the preceding article is used. It can be displaced vertically by 45 mm and inclined through 3° providing for a horizontal displacement of the beam by 15 mm. The incandescene of the gun cathode is made through a high-voltage cable. The magnetic lens (7-10v) is fed from a stabilized rectifier. The portable gun supply unit includes a high-voltage generator consisting of a transformer and a rectifier (25 kv, 3 kw) and an incandescene transformer (10 v, 30 amp) placed in an oil-filled container. The ЭЛУ-2 (ELU-2) unit, designed under the supervision of Engineer K.A. Lashkov, is intended for welding circular edge joints. Up to 30 parts can be welded without disturbance of the vacuum. The unit consists of a working chamber with an automatic device, an electron gun, a vacuum station, a high-voltage power supply source, a three-phase interrupter and two cabinets for electric equipment. Charging and discharging of the work pieces is made through a hatch in the operational chamber cover. The drive and control of the internal servomechanisms is brought about outside the chamber. Repeated evacuation up to a 5.10^{-5} mm Hg vacuum is performed

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S/135/61/000/001/011/018
A006/A001

Industrial Units for Welding With an Electron Beam

within 14 - 15 minutes. The unit is equipped with a portable control desk. Tests were made with both of the described machines. On the ELU-2 unit 200 - 210 butt chckes were welded to 2 mm thick aluminum alloy parts within 7 hours. During welding sufficient evacuation of the cavities was obtained, the oxide film was eliminated and the penetration depth was greater than in welding in a gas shield. Welding speed was 25 - 30 m/hr. On the ELU-1 machine various types of weld were produced with 1Kh18N9T (1Kh18N9T) steel, including circumferential, edge and over lap joints; thin walled parts were welded to thick walled ones. Sheets were welded on a copper backing. The speed of welding 1 mm thick sheets at 12 m-amp current in the beam and 22 kv accelerating voltage, was 34 m/hr. The minimum diameter of the electron beam is obtained at a distance of 30 - 40 mm from the focusing lens butt; the vacuum was 5.10^{-5} mm Hg. The joints had a satisfactory quality. The machines are recommended for welding pieces of high-melting and rare metals.

Card 3/4

Industrial Units for Welding With an Electron Beam

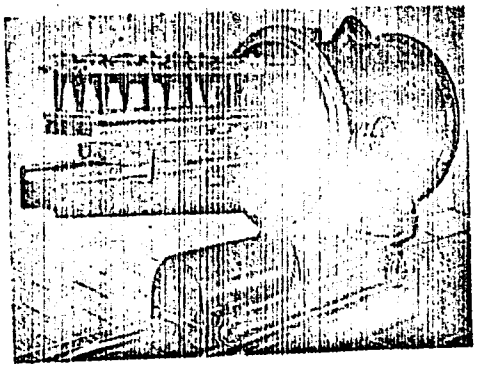


Figure 2:

Attachment for welding sheet material on the ELU-1 unit.

There are 5 figures and 4 references: 2 Soviet and 2 German.

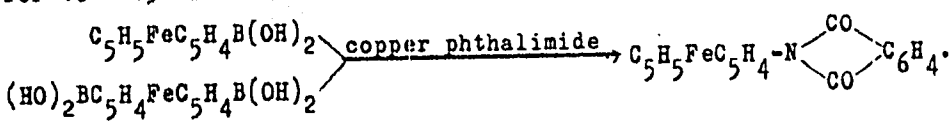
S/062/62/000/011/014/021
B101/B144

AUTHORS: Nesmeyanov, A. N., Sazonova, V. A., Gerasimenko, A. V., and Medvedeva, V. G.

TITLE: Reactions of ferrocenyl boric acids with copper phthalimide

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 11, 1962, 2073 - 2074

TEXT: The following reactions were carried out with ferrocenyl boric acid (I) and 1,1'-diferrocenylene diboric acid (II) in boiling pyridine for 10 - 15 min:



Styryl boric acid, phenyl boric acid, and p-anisyl boric acid react similarly with copper phthalimide. Compounds obtained: N-ferrocenyl phthalimide, yield from I: 47 %, from II: 29 %, m.p. 156 - 156.5°C; N-styryl phthalimide, yield 56 %; N-phenyl phthalimide, yield 19 %; and

Reactions of ferrocenyl boric... S/062/62/000/011/014/021
B101/B144

N-p-methoxy phenyl phthalimide, yield 34 %.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: June 4, 1962

Card 2/2

S/020/62/147/003/025/027
B101/B186

AUTHORS: Nesmeyanov, A. N., Academician, Sazonova, V. A., Gerasimenko, A. V.

TITLE: α-pyridyl-ferrocene and 1,1'-di-(α-pyridyl)-ferrocene

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 147, no. 3, 1962, 634 - 635

TEXT: The following syntheses of pyridine compounds of ferrocene, and reactions of these compounds, are described: (1) Ferrocene and a small amount (0.03 g from 3 g initial substance) of α-pyridyl ferrocene, m.p. 87 - 89°C, were obtained by heating 1,1'-ferrocenylene-diboric acid with copper carbonate in pyridine under an N_2 atmosphere, followed by extraction with ether and chromatographic separation on aluminum oxide. (2) 24% α-pyridyl ferrocene and 3% 1,1'-di-(α-pyridyl)-ferrocene, m.p. 179 - 180°C were obtained by reaction of ferrocenyl-lithium and 1,1'-dilithium ferrocene mixtures dissolved in ether, under an N_2 atmosphere, with dropwise addition of pyridine and chromatographic separation. (3) Oxidation of α-pyridyl ferrocene and potassium permanganate in an acid medium was found to yield picolinic acid. (4) A red deposit of α-pyridyl ferrocene hydro-

Card 1/2

chloride, unstable in aqueous solution was obtained by bubbling dry HCl through the ether solution of α-pyridyl ferrocene. (5) α-pyridyl ferrocene hydrochloride solution was poured into a tetraphenyl sodium boride solution, yielding a tetraphenyl borate deposit. Examinations of pyridyl ferrocenes are being continued.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: July 31, 1962

NESMEYANOV, A.N.; SAZONOVA, V.A.; GERASIMENKO, A.V.; MEDVEDEVA, V.G.

Reaction of ferrocenboronic acids with copper phthalimide.
Izv. AN SSSR. Otd.khim.nauk no.11:2073-2074 N '62. (MIRA 15:12)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(Ferrocenboronic acid) (Phthalimide)

L 1949?-65
ACCESSION NR: AP5002075

and copper acetoacetate. "The phenylation of pentalacetoacetate was carried out together with V. G. Shubin, a student." Orig. art. has: 2 chemical formulas.

ASSOCIATION: none

SUBMITTED: 09May62 ENCL: 00 SUB CODE: OC

NO REF SOV: 001 OTHER: 006

Card 2/2

NESMEYANOV, A.N., akademik; SAZONOVA, V.A.; GERASIMENKO, A.V.; SAZONOVA, N.S.

Photolysis of α-pyridylferrocene salts. Dokl. AN SSSR 149 no.6:1354-1355 Ap '63. (MIRA 16:7)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Ferrocene) (Photochemistry)

GERASIMENKO, L.D. [Herasymenko, D.D.]

Lysogenecity of plasma-coagulating Staphylococci. Mikrobiol. zhur. (MIRA 18:8)
27 no.4:45-48 '65.

1. Odesskiy nauchno-issledovatel'skiy institut epidemiologii i mikrobiologii im. Mechnikova.

GERASIMENKO, D.D. [Herasymenko, D.D.]

Lysogenization of some Staphylococci. Mikrobiol. zhur. 27 no.5:61-63 '65. (MIRA 18:10)

1. Odesskiy nauchno-issledovatel'skiy institut epidemiologii i mikrobiologii.

GERASIMENKO, L.M.

Morphological and cytological changes in some algae species under the influence of colchicine, chlortetracycline, and trypaflavine. Mikrobiologiia 34 no.5:851-857 S-O '65. (MIRA 18:10)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.

L 13322-66 EWT(1)/FS(v)-3 SCTB DD

ACC NR: AP6001629 SOURCE CODE: UR/0220/65/034/006/1077/1079

AUTHOR: Goryunova, S. V.; Odoyevskaya, N. S.; Gerasimenko, L. M.

ORG: Institute of Microbiology, AN SSSR (Institut mikrobiologii AN SSSR)

32
B

TITLE: Some methods of ridding blue-green algae of contaminating bacteria

SOURCE: Mikrobiologiya, v. 34, no. 6, 1965, 1077-1079

TOPIC TAGS: microbiology, algae, purification method

ABSTRACT: Bacteriologically pure cultures of three strains of the blue-green algae Mastigocladus laminosus were obtained by culturing on media with 0.5, 0.1, and 0.01% mountain cranberry extract. It was found that the algal strains grew best with lower concentrations of extract. Since this method has seasonal limitations (because of the necessity of using fresh material), it is not recommended for universal use. However, it may be useful in a number of cases. [JS]

SUB CODE: 06/ SUBM DATE: 17Aug64/ OTH REF: 008/ ATD PRESS: 4168

Card 1/1 Fw UDC: 576.8.093.38

GERASIMENKO, F.V., inzhener.

Precast boiler made using cast iorn radiators. Transp.stroi. 6 no.10:31 O '56. (Boilers) (MLRA 10:1)

UVAROVA, Z.A.; KOROL', G.S.; ZYBENKO, L.D.; GERASIMENKO, G.

Effect of ammonium carbonate on certain physiological features in corn. Izv. AN Kazakh. SSR. Ser. bot. i pochv. no.1:52-56 '61. (MIRA 14:4)

(Ammonium carbonate—Physiological effect)
(Corn (Maize))

GERASIMENKO, G.; KONOVA, T.

Role of credit in the organization of working capital. Den. i kred. 20 no.1:14-20 Ja '62. (MIRA 15:1)
(Rostov Province--Machinery industry--Finance)
(Gorkiy Province--Machinery industry--Finance)

BELOBORODOVA [illegible], GERASIMENKO, G.D.

Effectiveness of the utilization of summer precipitation by the pasture vegetation of the semidesert and desert regions of Kazakhstan. Trudy KazNIGMI no.24:12-19 '65.

(MIRA 18:10)

137-135-58-11-19/21

AUTHORS: Gerasimenko, G.I. and Reviznikov, L.I.

TITLE: Industrial Practice of Soviet Students in Czechoslovakia (Proizvodstvennaya praktika sovetskikh studentov v Chekhoslovakii)

PERIODICAL: Svarochnoye proizvodstvo, 1958, Nr 11, pp 42-43 (USSR)

ABSTRACT: A group of Soviet students from MVTU imeni Bauman went to Czechoslovakia for practical training. During this period they studied the development of welding techniques in Czechoslovakia, the system of training welding engineers, the activities of the Bratislava Scientific Research Institute headed by Academician Chabelka, and those of the Ostrava Metallurgical Combine imeni Klement Gotvald. Information is given on the work of the Institute, which is occupied in designing welding equipment, in particular, for relief and electric slag welding. At present, experiments are being performed on the electric slag three-electrode welding of hollow shafts 1,500 mm in diameter and 250 mm in wall thickness. A series of relief welding presses of 1,000 kva capacity was also designed. Information is also presented on

Card 1/2

Industrial Practice of Soviet Students in Czechoslovakia

the work of the Vitkovice Metallurgical Combine imeni Klement Gotvald, comprising various plants where qualified workers are being trained. The electrode production of the electrode shop at this plant amounts to 4,000 tons per year. There are 2 photos and 1 organization chart.

1. Welding—Training 2. Welding—Czechoslovakia

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3416 52
S/184/62/000/002/004/004
D041/D112

1.2300

AUTHORS: Toropov, V.A., Candidate of Technical Sciences;
Gerasimenko, S.I., Engineer

TITLE: Welding of cast nickel-molybdenum alloys

PERIODICAL: Khimicheskoy mashinostroyeniye, no. 2, 1962, 33-36

TEXT: The article contains the results of experiments for determining the casting and corrosion characteristics of nickel-molybdenum alloys carried out at NIIKhIMMASh. The purpose was to develop a technology for welding up defects in castings from nickel-molybdenum alloys. Since nickel-molybdenum alloys have a low heat conductivity, the castings were welded without preheating, each subsequent seam layer being welded after the lower layer had cooled, using a minimum current density. XH-1 (KhN-1) electrodes were used, for which the authors received author's certificate no. 141231, dated Jan 17, 1961. The electrodes have good technological properties making it possible to obtain a weld metal whose chemical composition is analogous to

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that of the base alloy. The weld metal has the following composition: no more than 0.04% C; 0.15-0.35% Si; 0.2-0.7% Mn; no more than 0.025% S and P; 27-30% Mo; no more than 6% Fe; base -- Ni. Gas and air arc-welding are not possible. Before the removal of defects, the castings must be heat-treated at 1,150-1,180°C for at least 30 minutes and air-cooled in order to eliminate the casting stresses and to improve the machining quality. The welding stresses were eliminated by heat treatment at 1,150-1,180°C and air-cooling. Small defects can be welded without subsequent heat treatment. The obtained welds have a good corrosion resistance and good mechanical properties. The corrosion tests were carried out under the guidance of G.L. Shvarts, Candidate of Technical Sciences, and the metallographic experiments by Engineer G.N. Shumratova. There are 4 figures, 3 tables, and 7 references: 6 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: R.C. Perritok, Phillips, "Welding and Metal Fabrication", v. 26, no. 3, 1958.

GERASIMENKO, G.I., dotsent; Prinimali uchastiye: KUBOTA, V.P., marksheyder; BOLOTOV, G.D., marksheyder: KOKOLENKO, A.N., marksheyder

Comparative evaluation of mine surveying instruments used for underground chambers and covities. Izv.vys.ucheb.zav.; gor. zhur. 6 no. 12:48-53 '63. (MIRA 17:5)

1. Donetskiy ordena Trudovogo Krasnogo Znameni politekhnicheskiy institut.

ACCESSION NR: AR4027932 S/0137/64/000/002/E005/E005

SOURCE: RZh. Metallurgiya, Abs. 2E31

AUTHOR: Toropov, V. A.; Gerasimenko, G. I.

TITLE: Welding of nickel-molybdenum alloys

CITED SOURCE: Tr. vses. n.-i. i konstrukt. in-t khim. mashinostr. vy*p. 43, 1963, 77-83

TOPIC TAGS: nickel alloy welding, molybdenum alloy welding, argon arc welding

TRANSLATION: For welding cast Ni-Mo alloys N70M26L, N65M20L, use of KhN-1 electrodes is recommended, which provide a deposited metal of the following chemical composition (in %): C $\leq$ 0.04, Si 0.15-0.35, Mn 0.2-0.7, S $\leq$ 0.025, P 0.025, Ni 64.0-68.0, Mo 27.0-30.0, bal. Fe. In the course of welding of N60M35L, large cracks are formed in the heat-affected zone. The mechanical properties of weld joints of N70M26L and N70M26L are, respectively, σ_b 59.9 kg/mm^2 and 65.4 kg/mm^2. The corrosion resistance of the weld metal is higher than that of the base metal. Also given is a technological process for the argon-arc welding of a sheet Ni-Mo alloy 2 mm thick. The joint made of NIMO-28 alloy has σ_b 78.9 kg/mm^2, and a bending

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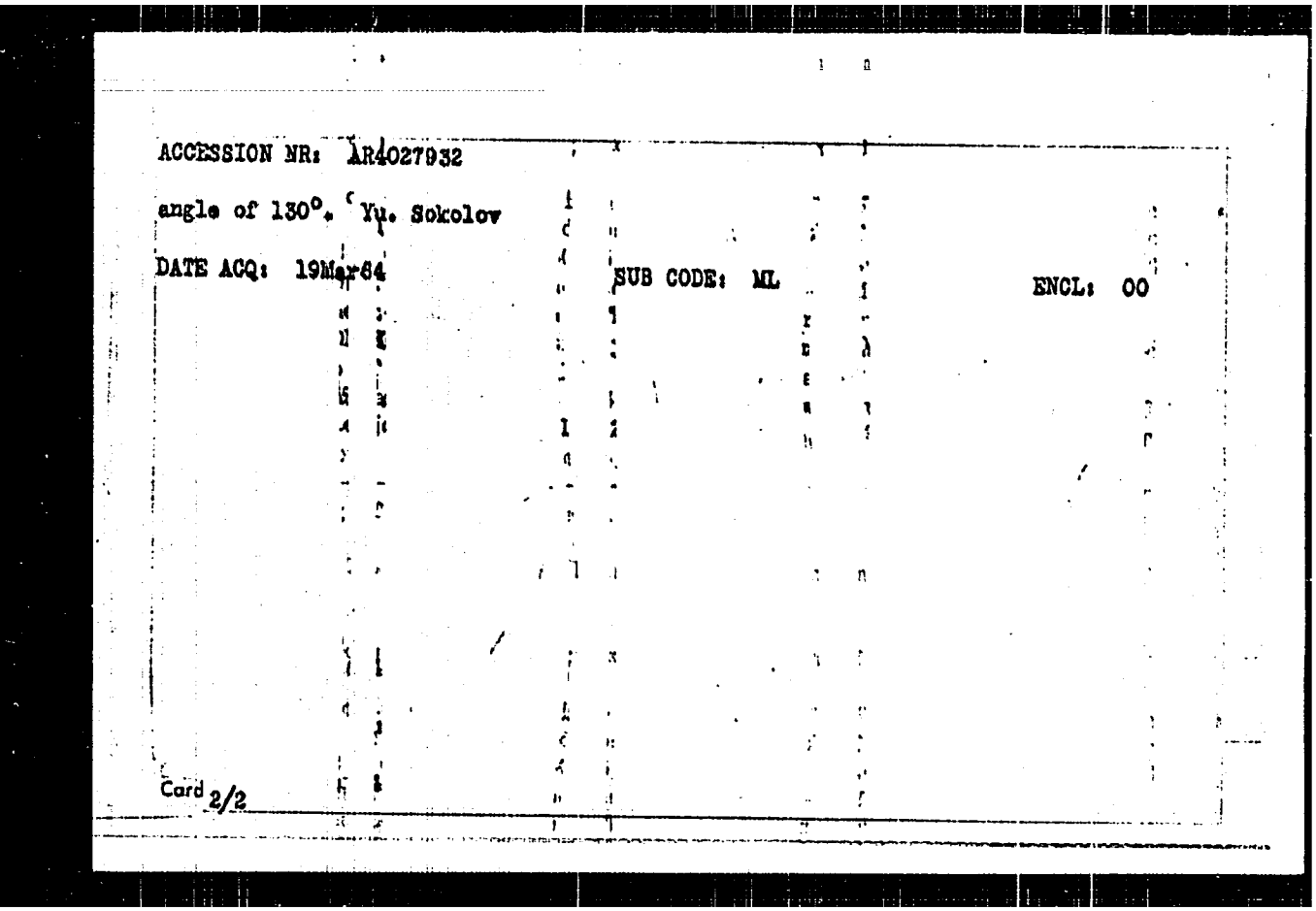

ACCESSION NR: AR4027932

angle of 130°. Yu. Sokolov

DATE ACQ: 19Mar64 SUB CODE: ML ENCL: 00

Card 2/2

ACCESSION NR: AP4025738 S/0184/64/000/001/0030/0032

AUTHORS: Shevelkin, B. N. (Candidate of technical sciences); Toropov, V. A. (Candidate of technical sciences); Gerasimenko, G. I. (Engineer)

TITLE: Titanium lining of containers made of carbon steel

SOURCE: Khimicheskoye mashinostroyeniye, no. 1, 1964, 30-32

TOPIC TAGS: carbon steel, St.3 carbon steel, titanium plate, VT-1 titanium, corrosion, metal corrosion prevention, plating, welding, resistance welding, seam welding, contact-roller welding, welded connection, vacuum technique, leak detection, forging, hot forging, fagot weld

ABSTRACT: This study made it possible to develop the most effective welding procedure for installing unattached titanium linings into carbon steel containers used by the chemical industry. A sectional view of such a container (made of St.3 steel) with 400-liter capacity is presented in Fig. 1 on the Enclosure. Different techniques for welding the linings (6-8 mm thick) to various parts of the container are described. Lids and bottom parts of such vessels were made of welded fagots consisting of two steel disks with a titanium interlayer. Hot forging of the

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ACCESSION NR: AP4025738

fagots at 700-750C secured a good adherence of the lining to carbon steel. The shell of the containers was made of titanium sheets 0.5 mm thick, and called for welding by the contact-roller technique with a 4-6 mm overlap. Collars were stamped (or rolled) from argon-arc welded titanium sheet rings. Seam-welding was resorted to when these collars were attached to the shells. The outlets (50 mm in diameter) were made of titanium 0.5 mm thick. They were welded by a modified contact-roller procedure and were attached to the flanges by automatic argon-arc welding with infusible VT-15 electrodes. Vacuum testing technique was used in leak detection in the containers. The best results were obtained with helium leak testers. The authors claim that the results obtained by them are not inferior to those produced by argon-arc welding alone. They state that the resistance welding technique, which is much simpler of the two, should be applied more often. Orig. art. has: 2 tables and 4 figures.

ASSOCIATION: none

SUBMITTED: 00	DATE ACQ: 14Feb64	ENCL: 01
SUB CODE: ML	NO REF SOV: 000	OTHER: 000

Card 2/2

ACCESSION NR: AP4013293 S/0135/64/000/002/0026/0027

AUTHORS: Toropov, V. A. (Candidate of technical sciences); Shevelkin, N. N. (Candidate of technical sciences); Samochatov, I. M. (Engineer); Gerasimenko, G. I. (Engineer)

TITLE: Technology of producing welded devices lined with thin corrosion resistant steel plates

SOURCE: Svarochnoye proizvodstvo, no. 2, 1964, 26-27

TOPIC TAGS: welding, stamping, lining, corrosion resistant steel, Kh18N9T steel, OKh18N10T steel, St3 steel, steel container

ABSTRACT: The article presents a description of the technological procedures used in preparing various parts of cylindrical welded devices for the chemical industry. These parts (up to 1 m in diameter) were lined with corrosion-resistant steel (Kh18N9T and OKh18N10T). In this type of devices the lining was not welded to the steel base; these parts cannot be used for procedures requiring vacuum. The technique used in producing them secured high corrosion stability of welded connections in the steel lining at its minimum thickness. An example of such a device is shown

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ACCESSION NR: AP4013293

in Fig. 1 on the Enclosure. Here the frame and the lid were made of steel St3 8-10 mm thick. The fettling material used consisted of two carbon steel sheets 8 mm thick and an interlayer of corrosion-resistant steel. The interlayer was either solid or consisted of two sheets welded together. The process of fabricating such devices produced a saving of 80 to 90% in steel. Orig. art. has: 1 table, 3 figures, and 4 formulas.

ASSOCIATION: none

SUBMITTED: 00	DATE ACQ: 26Feb64	ENCL: 01
SUB CODE: ML	NO REF SOV: 000	OTHER: 000

Card 2/3

TOROPOV, V.A., kand.tekhn.nauk; SHEVELKIN, B.N., kand.tekhn.nauk; SAMOCHATOV, I.M., inzh.; GERASIMENKO, G.I., inzh.

Technology of the manufacture of welded apparatus lined with thin-sheet, corrosion-resistant steel. Svar.proizv. no.2:26-27 F '64. (MIRA 18:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy i konstruktorskiy institut khimicheskogo mashinostroyeniya.

GERASIMENKO, G.I., inzh.; TOROPOV, V.A., kand.tekhn.nauk

Deposition of a corrosion-resistant alloy on working surfaces of closing equipment. Svar.proizv. no.2:28-29 F '64.
(MIRA 18:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy i konstruktorskiy institut khimicheskogo mashinostroyeniya.

L 33486-66 EWT(m)/EWP(v)/T/EWP(t)/ETI/EWP(k) IJP(c) JD/HM/WB

ACC NR: AP6012583 (A) SOURCE CODE: UR/0314/66/000/004/0026/0027

AUTHOR: Gladyrevskaya, S. A. (Candidate of technical sciences); Pavlov, N. V. (Engineer); Gerasimenko, G. I.; Gan, I. I. (Engineer)

ORG: none

TITLE: Bimetallic steels in the production of containers

SOURCE: Khimicheskoye i neftyanoye mashinostroyeniye, no. 4, 1966, 26-27

TOPIC TAGS: corrosion resistant steel, railway rolling stock ~~transportation equipment~~, solid mechanical property, bimetal, storage tank, metal cladding, metal drawing, welding, protective coating, corrosion resistance, St. 3+OKh23N28M3D3T bimetallic corrosion-resistant steel

ABSTRACT: An industrial batch of St. 3 + OKh23N28M3D3T bimetallic corrosion-resistant steel has been produced by the Chelyabinsk Metallurgical Works (Chelyabinskiy metallurgicheskiy zavod) for the purpose of building an experimental tank from this steel. The mechanical characteristics of the latter are described. Tests for general and intercrystalline corrosion made on the cladding layer showed a high corrosion resistance. In 40% sulfuric acid, the corrosion rate was 0.001 — 0.008 mm/year. The corrosion-fatigue strength of this two-layer steel was also relatively high. Drawing of the steel associated

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UDC: 66.023.6:621.9-419

L 33486-66

ACC NR: AP6012583

4

with the stamping of bottoms can be carried out in the cold state, or, if the pressure applied by the press is insufficient, at 1050 – 900C. Recommendations for welding the steel are given. An experimental tank car constructed from this steel by the Zhdanov Heavy Machinery Plant (Zhdanovskiy zavod tyazhelogo mashinostroyeniya) successfully passed all the plant tests. Tests on the mechanical properties of bimetallic steel were performed in NIIKhimmash under the supervision of Engr. L. L. Kravchenko. Orig. art. has: 1 figure.

SUB CODE: 11, 13/SUBM DATE: none / ORIG REF: 001

joining of dissimilar metals 18

Card 2/2 90

GERASIMENKO, G.P., inzh.

Determining the turning angle of hoisting machines in fan-shaped position. Izv.vys.ucheb.zav.; gor.zhur. no.3:130-134 '58.
(MIRA 12:8)

1. Severo-Kavkazskiy gornometallurgicheskiy institut.
(Mine hoisting)

GERASIMENKO, G.P.; PUZOSHCHATOV, D.F.

Normalizing compressor performance in high mountain mines.
Izv.vys.ucheb.zav.; tsvet.met. 2 no.6:17-25 '59.
(MIRA 13:4)

1. Severokavkazskiy gornometallurgicheskiy institut. Kafedra gornoy mekhaniki.
(Compressors)
(Mining engineering--Equipment and supplies)

GERASIMENKO, G.P., insh.

Causes of explosions in compressor units in coal mines.
Bezop.truda v prom. 3 no.12:10 D '59. (MIRA 13:4)
(Coal mining machinery--Safety measures)

GERASIMENKO, G.P., inzh.

Improving work safety and increasing the production capacity of compressor plants in the Donets Basin mines. Ugol' Ukr. 4 no.2:17-19 F '60. (MIRA 13:6)
(Donets Basin--Coal mines and mining--Safety measures)
(Compressors)

S/094/60/000/006/003/005
E073/E335

AUTHOR: Gerasimenko, G.P., Engineer

TITLE: Operation of Electrical Machinery under High-altitude Conditions

PERIODICAL: Promyshlennaya energetika, 1960, No. 6, pp. 17-19

TEXT: The aim of the paper is to consider the thermal processes in electrical machinery and to determine the extent to which their nominal power can be utilised under high-altitude conditions in mountains. On the basis of simple thermal calculations and application of a formula based on the theory of analogy of thermal processes, the following equation was obtained for determining the permissible loading of electrical machinery under high-altitude conditions:

$$I_1 = I_N \left[\frac{p_1}{p_o} \cdot \frac{T_o}{(T_o - 0.0065\ h)} \right]^{0.4} \cdot \sqrt{1 + \frac{0.0065\ h}{T_o}} \qquad (8)$$

where I_N is the nominal load at sea level,

Card1/3 p_o and p_1 - atmospheric pressure at sea level and at a given altitude, respectively,

S/094/60/000/006/003/005
E073/E335

Operation of Electrical Machinery under High-altitude Conditions

T_o - air temperature at sea level, ^oK,

τ_o - maximum permissible overheating temperature for rated conditions,

h - altitude above sea level.

In the case of machinery operating in heated spaces the following limitation applies:

$$0.0065\ h \rightarrow \lim\ (20 - 25\ ^oC)\ .$$

However, there are no limitations to the value of 0.0065 h if the machinery is operated in the open air. The following numerical values were obtained for machinery operating under high-altitude conditions (ratio of the permissible current loading at high altitude to the rated current loading at sea level) fr a maximum over temperature of components $\tau_o = 65\ ^oC$:

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S/094/60/000/006/003/005
E073/E335

Operation of Electrical Machinery under High-altitude Conditions

Altitude above sea level (h), M	0	1 000	2 000	3 000	4 000	5 000
I_1 (0.0065 h -> lim 20 °C)	1.00 I_N	1.007	1.012	1.013	0.967	0.907
I_1 - machinery operating in open air	1.00 I_N	1.007	1.012	1.013	1.011	0.992.

The following conclusions are arrived at. For electrical machinery operating in a heated building at an altitude of 4 000 m the nominal load remains practically unchanged. With further increase in altitude the load should be reduced in accordance with results calculated by means of formula (8). For electrical machinery operating in the open air the permissible rated load remains practically unchanged up to an altitude of 5 000 m. Thus, there is no reason to fear overloading of electrical machinery under mountain conditions if the load does not exceed the rated value. There are 5 Soviet references.

Card 3/3

GERASIMENKO, G. P.

Cand Tec Sci, Diss -- "Normalization of the operation of a two-stage piston compressor in high-mountain mines". Ordzhonikidze, 1961. 15 pp with graphics, 22 cm (Min of Higher and Inter Spec Educ RSFSR. North Caucasus Mining and Met Inst), 120 copies, Not for sale (KL, No 9, 1961, p 181, No 24332). /61-54892/

GERASIMENKO, G.P.

Determining the operating efficiency of compressors feeding the common network. Prom.energ. 17 no.1:19-20 Ja '62.
(MIRA 14:12)

(Compressors)

GERASIMENKO, G.F.; PUZOSHCHATOV, D.F.

Normalization of temperature conditions for the operation of compressors in high elevation mines. Izv.vys.ucheb.zav.; tsvet. met. 3 no.2:121-26 '60. (MIRA 15:4)

1. Severokavkazskiy gornometallurgicheskiy institut, kafedra gornoy mekhaniki.
(Mining engineering) (Altitudes, Influence of)

GERASIMENKO, G.P.

Using various methods of regulating the performance of automated compressor plants. Izv. vys. ucheb. zav.; tsvet. met. no.4:28-32 '62. (MIRA 16:5)

1. Severokavkazskiy gornometallurgicheskiy institut, kafedra gornoy mekhaniki.
(Compressors) (Automatic control)

SAMANOV, V.V.; GAVRIKOV, K.V.; GERASIMENKO, I.F.; PRIYMA, G.Ya.

Programming device for the study of human reflex activity. Zhur. vys.nerv.deiat. 12 no.1:181-183 Ja-F '62. (MIRA 15:12)

1. Chair of Physiology and Morphology, Pedagogical Institute, and Scientific Pedagogical Laboratory, R.S.F.S.R. Academy of Pedagogical Sciences, Volgograd.
(REFLEXES)

Gerasimenko, I.I.

A

K

PROCESSES AND PROPERTIES INDEX

23-318. Experiments on the Production of Lined Apparatus. E. M. Lapitskaia and I. I. Gerasimenko. *Avtogennoe Delo (Welding)*, no. 1, 1947, p. 29. (In Russian.)

Both spot and linear-welding techniques were used for the application of corrosion resistant steel sheets to the interior of tanks.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

GERASIMENKO, I.I.; LIBIZOV, N.I.; NIKOL'SKAYA, B.S.; SATSYPEROV, F.A.
[Gerasimenko, I.I.]; ITSKOV, N.Ya, kandidat sel'skokhozyaystvennykh nauk, redaktor; TUROVA, A.D., doktor meditsinskiy nauk, redaktor; ZHUKOV, G.I., redaktor; BEL'CHIKOVA, Tu.S., tekhnicheskiy redaktor

[Indian datura (D. innoxia Mill] Durman indeiskii. Pod red. N.IA. Itskova i A.D.Turovoi. Moskva, Gos. izd-vo med. lit-ry, 1953. 77 p. [Microfilm] (MLRA 7:10)
(Datura)

[redacted]

[redacted], I. I.

[redacted], I. I.- "Scopolamine-[redacted] Plants [redacted] and the Outlook for Their Culture in the USSR." Tartu State U. Tartu, 1955. (Dissertation for the Degree of Candidate of Biological Sciences)

So; Knizhnaya Letopis', No 3, 1956

GERASIMENKO, I.I.; KIBAL'CHICH, P.N.; LABENSKIY, A.S.; RALASHOVA, Ye.G.

Solanum aviculare as a source of steroids. Med.prom. 12 no.2:11-18 F '58. (MIRA 11:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh i aromaticheskikh rasteniy i Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.
(NIGHTSHADE) (ALKALOIDS)

SOV/79-28-11-48/53

AUTHORS: Labenskiy, A. S., Gerasimenko, I. I., Utkin, L. M.

TITLE: On the Glucoalkaloid of the Plant Solanum Megacarpum Koidz, a Big-Fruit Nightshade (O glyukoalkaloide rasteniya Solanum megacarpum Koidz(paslen krupnoplodnyy))

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 11, pp 3120-3122 (USSR)

ABSTRACT: One of the modern natural sources of steroid compounds are the various types of nightshades that contain glucoalkaloids of steroid nature. The separation of the glucoalkaloids from the leaves and the upper shoots of this plant during the ripening of the fruit was carried out according to Kuhn (Kun, Ref 1) with the glucoalkaloid $C_{49}H_{81}O_{20}N$ (melting point 259-260°) being isolated. Its properties differ from those already known so that it was given the new term "megacarpine". It forms a sulfate that is difficult to dissolve in water. In the hydrolytic cleavage with hydrochloric acid in methanol a chloro hydrate of the aglucone $C_{27}H_{45}O_2N.HCl.5H_2O$ (melting point 298-299°) was obtained. Its empirical formula and its

Card 1/3

On the Glucoalkaloid of the Plant Solanum Megacarpum Koidz, a Big-Fruit Nightshade

melting point correspond to those of "tomatidine" (Ref 2). The obvious decrease of the melting point of the mixture of these two compounds and the deviation of the specific optical rotation of the obtained aglucone from that of "tomatidine" is in contrast to the identity especially as in the former there is no double bond (Refs 3, 4). The nature of the sugar compounds formed in the hydrolysis of megacarpine was determined by paper chromatography. On this occasion glucose, galactose, and xylose were found, which corresponds to the composition of "tomatine" and "demissine" (Refs 2, 5). The megacarpine thus consists of 4 molecules of simple sugar types. The optical rotation of the sum of all sugar compounds obtained in the hydrolysis amounted to +43.06°, which approximately corresponds to that obtained with the mixture of 2 molecules xylose, 1 molecule galactose and 1 molecule glucose. There are 8 references.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze (All Union Scientific Chemo-Pharmaceutical Research Institute imeni S. Ordzhonikidze)

GERASIMENKO, I.I.; KIBAL'CHICH, P.N.

Vegetative propagation of the nightshade Solanum aviculare
Forst. Bot.zhur. 44 no.10:1494-1495 O '59.
(MIRA 13:4)

1. Vsesoyuznyy institut lekarstvennykh i aromaticheskikh trav, Krasnodar.
(Nightshade) (Plant cuttings)

GERASIMENKO, I.I.

Some medicinal plants in Chinese medicine. Med.prom. 14 no.4: 54-57 Ap '60. (MIRA 13:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh i aromaticheskikh rasteniy.
(CHINA--BOTANY, MEDICAL)

GERASIMENKO, L.I.

Amount of scopolamine in Datura innoxia Mill. Med.prom. 14 no.11: 16-19 N '60. (MIRA 13:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh i aromaticheskikh rasteniy.
(SCOPOLAMINE)
(DATURA)

GERASIMENKO, I.I.; LABENSKIY, A.S.

Study of representatives of Solanum L. as sources of steroid compounds. Med. prom. 15 no.2:12-16 F '61. (MIRA 14:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh i aromaticheskikh rasteniy i Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.
(NIGHTSHADE)

GERASIMENKO, I.I.

On so-called Caucasian pyrethrums. Bot.zhur. 46 no.3:386-389 Mr '61. (MIRA 14:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh rasteniy, Moskovskaya oblast'.
(Transcaucasia--Pyrethrum)

GERASIMENKO, I.I.

Variation of alkaloid content in datura. Bot. zhur. 46 no.8: 1202-1205 Ag '61. (MIRA 15:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh i aromaticheskikh rasteniy.
(Datura)
(Alkaloids)

GERASIMENKO, I.I.

Intraspecific variation in Datura innoxia Mill. Bot.zhur. 47 no.2:282-284 F '62. (MIRA 15:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh i aromaticheskikh rasteniy.
(Datura—Varieties)

GERASIMENKO, I.I.

Systematics of the groundsel Senecio platyphyllus Sensu Grossheimii, 1949. Bot.zhur. 49 no.10:1465-1468 O '64. (MIRA 18:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh i aromaticheskikh rasteniy.

GERASIMENKO, I.I.; NIKONOV, G.K.

Comparative study of Solinum monnieri L. of Chinese and Far Eastern origin. Rast. res. 1 no. 4:548-551 '65.
(MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh i aromaticheskikh rasteniy, Moskva. Submitted October 1, 1964.

[illegible] AN SSSR, Doklady, v. 158, no. 4, 1964, 896-899

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ABSTRACT: The reactions of equimolar amounts of the phosphonitryl chloride trimer with resorcinol or with hydroquinone were investigated. Reaction temperature, the nature of the solvent and of the tertiary amine catalyst affected the extent to which the reaction proceeded. IR spectra indicated the products of reactions in nitrobenzene were soluble low molecular polymeric homologs containing alternating trimeric phosphonitryl rings and hydroxyaromatic radicals. Two [illegible] were obtained from reactions in m-xylene with pyridine or quinoline as